

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A PEDESTRIAN ACTIVATED HAZARD IDENTIFICATION BEACON AND SMART PAD DETECTABLE WARNING SURFACE AT THE INTERSECTION OF MD 147 (HARFORD ROAD) AND GARNET ROAD IN BALTIMORE COUNTY, MARYLAND. MD 147 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER AT WOODSIDE AVENUE WILL BE USED.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.03-01 (SHOULDER WORK)  
STANDARD NO. MD-104.03-03 (LEFT LANE CLOSURE)  
STANDARD NO. MD-104.03-05 (RIGHT LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

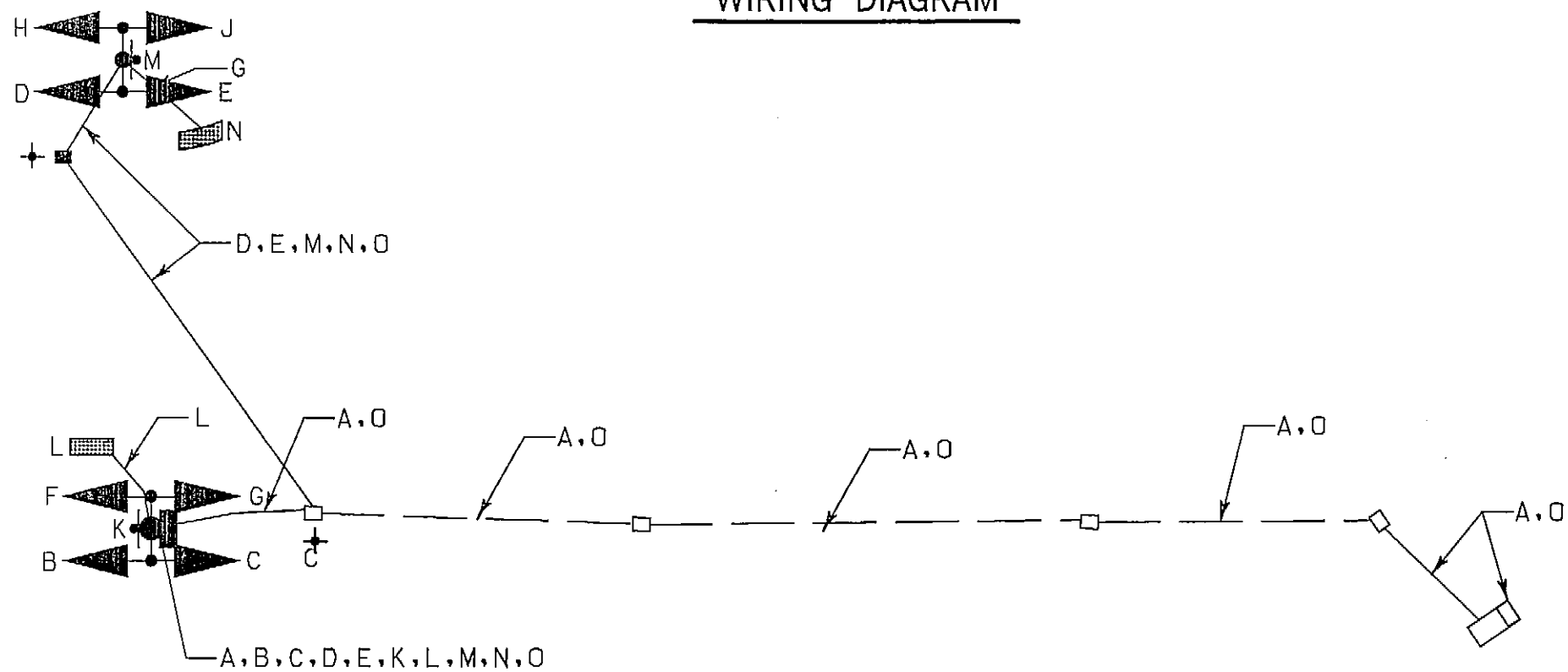
MS. ERIN KUHN  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-2781/2785

MR. MIKE PASQUARIELLO  
ASST. DISTRICT UTILITY ENGINEER  
PHONE: (410) 321-2841

MR. ANDRE FUTRELL  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-2761

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

WIRING DIAGRAM



WIRING KEY

- A } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
B } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
C }  
D }  
E }  
F } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
G }  
H }  
J }  
K } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
L }  
M }  
N }  
O } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)  
+ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
8000	1 EACH	'G' SIZE CABINET
9571	42 <del>61</del> S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH SIGN NOS. 13 & 14 (9 IN. x 12 IN.) (BLACK ON WHITE) - POLE MOUNT - 2 EACH SIGN NOS. 7 & 8 (102 IN. x 42 IN.) (BLACK ON FLO. YELLOW) - MAST ARM MOUNT - 4 EACH SIGN NOS. 9,10,11 & 12 W11-2 (30 IN. x 30 IN.) AND W16-13 (24 IN. x 18 IN) - POLE MOUNT
9000	2 EACH	PEDESTRIAN PUSHBUTTON

EQUIPMENT LIST "C"

NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
2002	2 C.Y.	TEST PIT EXCAVATION
<del>5005</del>	<del>20 L.F.</del>	<del>24 INCH HEAT-APPLIED WHITE PERMANENT-PREFORMED THERMOPLASTIC PAVEMENT MARKINGS</del>
<del>8061</del>	<del>2 EACH</del>	<del>AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION &amp; SIGNS</del>
<del>8007</del>	<del>2 EACH</del>	<del>AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION &amp; SIGNS</del>
8008	2 <del>1</del> EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
<del>6017</del>	<del>1 EACH</del>	<del>MAST ARM POLE &amp; 70 FT MAST ARM ANY 'T' DIMENSION</del>
8033	45 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8034	50 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	42 <del>61</del> S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8037	20 S.F.	REMOVE-REINSTALL DECORATIVE BRICK SIDEWALK
8038	450 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
<del>8039</del>	<del>30 L.F.</del>	<del>1 INCH ELECTRICAL CONDUIT GALVANIZED RISER</del>
<del>8042</del>	<del>1 EACH</del>	<del>ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240V, 60 AMPS</del>
8045	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8050	8 <del>1</del> EACH	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
<del>8052</del>	<del>2 EACH</del>	<del>CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE</del>
8054	275 <del>265</del> L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8055	40 L.F.	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
8056	265 <del>30</del> L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	415 <del>400</del> L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8061	2 EACH	PUSHBUTTON AND SIGN
8064	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT
NEG	2 EACH	SMART PED DETECTABLE WARNING SURFACE

PHASE CHART

	1	2	3	4	5	6	7	8
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
NORMAL OPERATION	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK
SPECIAL OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY

REDLINE REVISION NO. 1  
1/16/2009  
REVISED QUANTITIES AND  
WIRING DIAGRAM



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 147 (HARFORD ROAD) AND  
GARNET ROAD /POST OFFICE



GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 12/2/2009 CONTRACT NO. XX4455185

DESIGNED BY S. Bloss COUNTY BALTIMORE  
DRAWN BY S. Bloss LOGMILE  
CHECKED BY N. Leary TMS NO. J368  
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 4695A DRAWING TSP-5 OF 5 SHEET NO. 5 OF 5



Whitman, Requardt and Associates, LLP  
Engineers, Architects and Planners

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Baltimore, Maryland 21231  
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PLOTTED: 01-21-2009  
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